



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,040	02/01/2001	Mathias Bischoff	GR 00 P 1078 US	8362

7590 05/10/2004

LERNER AND GREENBERG, P.A.  
POST OFFICE BOX 2480  
HOLLYWOOD, FL 33022-2480

EXAMINER

PHAN, HANH

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 05/10/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/775,040

Applicant(s)

BISCHOFF, MATHIAS

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2001.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 20-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-16 and 20-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 02/17/2004.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 9-11 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fatehi et al (US Patent No. 6,535,313).

Regarding claim 1, referring to figure 4, Fatehi discloses an access node for optical networks with variable access wavelengths, comprising:

a plurality of first optical conductors (Fig. 1) each disposed to connect a respective user device (i.e., data source 102-1 and data source 102-M, Fig. 4);

at least one second optical conductor (Fig. 4) for connecting the access node to an optical network; and

a plurality of light sources (i.e., E/O converters 460, Fig. 4) emitting light signals at wavelengths of the optical network and connected to the first optical conductors such

that the light signals of the light sources can be modulated (col. 5, lines 30-67, col. 6, lines 1-67, and col. 7, lines 1-10).

Regarding claim 2, Fatehi further teaches at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network (Fig. 4).

Regarding claims 3 and 4, Fatehi further teaches the light sources are lasers (Fig. 4).

Regarding claims 9 and 11, Fatehi further teaches a signal processing block with optical wavelength division multiplexers connected between the first optical conductors and the second optical conductors (Fig. 4).

Regarding claim 10, Fatehi further teaches a second switching disposed between the first optical conductors and the signal processing block (Fig. 4).

Regarding claim 13, Fatehi further teaches a further switching matrix combined with said second switching matrix (Fig. 4).

4. Claims 1, 2, 16 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Fatehi et al (US Patent No. 6,535,313).

Regarding claims 1, 16 and 21, referring to Figures 3-6, Ushirizawa discloses a method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

generating a number light signals of different wavelength in an access node (Figs. 3-6);

extracting the light signals from the access node and transmitting the light signals to a number user devices (Figs. 3-6);

modulating (i.e., optical modulators 4-1, 4-2, 4-N, Figs. 3-6) the light signals with user signals in the user devices to form modulated light signals;

injecting the modulated light signals into the access node (Figs. 3-6);

generating wavelength division multiplex signals in the access node (Figs. 3-6);

and

feeding the wavelength division multiplex signals into the optical network (col. 4, lines 53-67, col. 5, lines 1-67, col. 6, lines 1-67 and col. 7, lines 1-25).

Regarding claim 2, Usirizawa further teaches at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network (Fig. 3).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatehi et al (US Patent No. 6,535,313) in view of Pan et al (US Patent 6,275,511).

Regarding claim 5, Fatehi teaches all the aspects of the claimed invention as set forth in the rejection to claim 1 above except fails to teach optical coupling elements disposed between the light sources and the first optical conductors. However, Pan teaches optical coupling elements disposed between the light sources and the first optical conductors (Figs. 7A and 7B, col. 6, lines 40-67 and col. 7, lines 1-24). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the optical coupling elements disposed between the light sources and the first optical conductors as taught by Pan in the system of Fatehi. One of ordinary skill in the art would have been motivated to do this Pan suggests in column 6, lines 40-67 and col. 7, lines 1-24 that using such the optical coupling elements disposed between the light sources and the first optical conductors have advantage of allowing providing the optical information signals from the users into an optical network.

Regarding claim 6, the combination of Fatehi and Pan teaches the optical coupling elements are selected from the group consisting of first circulators and directional couplers.

Regarding claims 14 and 15, the combination of Fatehi and Pan teaches a user device comprising an optical circulator and a modulator to be connected to an information source (Figs. 7A and 7B of Pan).

Art Unit: 2633

7. Claims 7, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatehi et al (US Patent No. 6,535,313) in view of Ushirozawa (US Patent 6,137,613).

Regarding claims 7 and 8, Fatehi teaches all the aspects of the claimed invention as set forth in the rejection to claim 1 above except fails to teach a first switching matrix connected between the light sources and the first optical conductors. However, Ushirozawa teaches a first switching matrix connected between the light sources and the first optical conductors (Figs. 3-6, col. 4, lines 53-67, col. 5, lines 1-67 and col. 6, lines 1-16). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the first switching matrix connected between the light sources and the first optical conductors as taught by Ushirizawa in the system of Fatehi. One of ordinary skill in the art would have been motivated to do this since Ushirozawa suggests in column 4, lines 53-67, col. 5, lines 1-67 and col. 6, lines 1-16 that using such the first switching matrix connected between the light sources and the first optical conductors have advantage of allowing a selected one of plurality of light sources can be modulated with a selected one of a plurality of data signals.

Regarding claim 12, the combination of Fatehi and Ushirizawa teaches the at least one additional signal processing unit is selected from the group consisting of a switching matrix, an optical switch, an optical amplifier, and an optical monitoring device (Fig. 4 of Fatehi and Figs. 3-6 of Ushirizawa).

8. Claims 20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushirozawa (US Patent 6,137,613) in view of Pan et al (US Patent 6,275,511).

Regarding claims 20, 22 and 23, Ushirizawa teaches all the aspects of the claimed invention as set forth in the rejection to claim 1 above except fails to teach each user device with a circular and a modulator. However, Pan teaches each user device with a circular and a modulator (Figs. 7A and 7B, col. 6, lines 40-67 and col. 7, lines 1-24). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the optical coupling elements disposed between the light sources and the first optical conductors as taught by Pan in the system of Ushirizawa. One of ordinary skill in the art would have been motivated to do this Pan suggests in column 6, lines 40-67 and col. 7, lines 1-24 that using such the optical coupling elements disposed between the light sources and the first optical conductors have advantage of allowing providing the optical information signals from the users into an optical network.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-16 and 20-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.



Art Unit: 2633

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

A handwritten signature in cursive script, appearing to read 'Hanh Phan', is written over a horizontal line.

Hanh Phan

04/30/2004